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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,083	10/11/2005	Takuma Hojo	SHIGA7.029APC	2712
20995 7590 10/16/2007 KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			EXAMINER HAMILTON, CYNTHIA	
			ART UNIT	PAPER NUMBER
			1795	
			NOTIFICATION DATE	DELIVERY MODE
			10/16/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
eOAPilot@kmob.com

**Advisory Action
Before the Filing of an Appeal Brief**

Application No.

10/553,083

Applicant(s)

HOJO ET AL.

Examiner

Cynthia Hamilton

Art Unit

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--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 October 2007 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☐ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☒ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
5. ☐ Applicant's reply has overcome the following rejection(s): _____.
6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
The status of the claim(s) is (or will be) as follows:
Claim(s) allowed: _____.
Claim(s) objected to: _____.
Claim(s) rejected: _____.
Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
SEE ATTACHMENT.
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____.
13. ☒ Other: See ATTACHMENT.

**CYNTHIA HAMILTON
PRIMARY EXAMINER**

Cynthia Hamilton
Primary Examiner
Art Unit: 1795

**Notice of Non-Compliant
Amendment (37 CFR 1.121)**

Application No.

10/553,083

Examiner

Cynthia Hamilton

Applicant(s)

HOJO ET AL.

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The amendment document filed on 07 February 2008 is considered non-compliant because it has failed to meet the requirements of 37 CFR 1.121 or 1.4. In order for the amendment document to be compliant, correction of the following item(s) is required.

THE FOLLOWING MARKED (X) ITEM(S) CAUSE THE AMENDMENT DOCUMENT TO BE NON-COMPLIANT:

- ☐ 1. Amendments to the specification:
- ☐ A. Amended paragraph(s) do not include markings.
 - ☐ B. New paragraph(s) should not be underlined.
 - ☐ C. Other _____.
- ☐ 2. Abstract:
- ☐ A. Not presented on a separate sheet. 37 CFR 1.72.
 - ☐ B. Other _____.
- ☐ 3. Amendments to the drawings:
- ☐ A. The drawings are not properly identified in the top margin as "Replacement Sheet," "New Sheet," or "Annotated Sheet" as required by 37 CFR 1.121(d).
 - ☐ B. The practice of submitting proposed drawing correction has been eliminated. Replacement drawings showing amended figures, without markings, in compliance with 37 CFR 1.84 are required.
 - ☐ C. Other _____.
- ☐ 4. Amendments to the claims:
- ☐ A. A complete listing of all of the claims is not present.
 - ☐ B. The listing of claims does not include the text of all pending claims (including withdrawn claims)
 - ☐ C. Each claim has not been provided with the proper status identifier, and as such, the individual status of each claim cannot be identified. Note: the status of every claim must be indicated after its claim number by using one of the following status identifiers: (Original), (Currently amended), (Canceled), (Previously presented), (New), (Not entered), (Withdrawn) and (Withdrawn-currently amended).
 - ☐ D. The claims of this amendment paper have not been presented in ascending numerical order.
 - ☐ E. Other: _____.

- ☒ 5. Other (e.g., the amendment is unsigned or not signed in accordance with 37 CFR 1.4):

Applicants cited list of claims was unchanged but presented claim 1 with amendment markings. Thus, the listing cannot be entered as claim 1 is not properly presented. The examiner notes that claim 1 without markings of amendments would have been entered. Old listing of claims remains as that under examination. For further explanation of the amendment format required by 37 CFR 1.121, see MPEP § 714.

TIME PERIODS FOR FILING A REPLY TO THIS NOTICE:

1. Applicant is given **no new time period** if the non-compliant amendment is an after-final amendment or an amendment filed after allowance. If applicant wishes to resubmit the non-compliant after-final amendment with corrections, the **entire corrected amendment** must be resubmitted.
2. Applicant is given **one month**, or thirty (30) days, whichever is longer, from the mail date of this notice to supply the correction, if the non-compliant amendment is one of the following: a preliminary amendment, a non-final amendment (including a submission for a request for continued examination (RCE) under 37 CFR 1.114), a supplemental amendment filed within a suspension period under 37 CFR 1.103(a) or (c), and an amendment filed in response to a *Quayle* action. If any of above boxes 1. to 4. are checked, the correction required is only the **corrected section** of the non-compliant amendment in compliance with 37 CFR 1.121.

Extensions of time are available under 37 CFR 1.136(a) only if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action.

Failure to timely respond to this notice will result in:

Abandonment of the application if the non-compliant amendment is a non-final amendment or an amendment filed in response to a *Quayle* action; or

Non-entry of the amendment if the non-compliant amendment is a preliminary amendment or supplemental amendment.

Legal Instruments Examiner (LIE), if applicable

Telephone No.

**CYNTHIA HAMILTON
PRIMARY EXAMINER**

Primary Examiner Cynthia Hamilton

Cynthia Hamilton

ATTACHMENT

1. Other:

The information disclosure statement filed October 2, 2007 fails to comply with 37 CFR 1.97(d) because it lacks a statement as specified in 37 CFR 1.97(e). It has been placed in the application file, but the information referred to therein has not been considered.

Claim 1 is objected to because of the following informalities: more than one period and thus more than one sentence being present. Appropriate correction is required.

2. The request for reconsideration has been considered but does not place the application in condition for allowance because of the following:

Applicants argue with respect to claim 1 and rejection of claims 1 and 4-11 under 35 U.S.C. 103(a) as being unpatentable over Malik et al. (6,133,412) in view of Malik et al. (SPIE Vol. 3678, 1999) the following: "Malik et al (6,133,412) or Malik et al (SPIE Vol. 3678) only recite a copolymer, and neither of these references teaches or suggests, alone or in combination, a mixture of a polymer and a copolymer, or the unexpected effects obtained with a resist composition comprising these components. Thus, even if a prima facie showing of obviousness was established, these unexpected results, in addition to those described below, would overcome any such showing."

The examiner answers that claim 1 requires that resin component (A) is a polymer. That means that component (A) is limited to the polymer because applicants used "is". Thus the

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polymer described as component a is a mixture of polymers wherein there is present polymers comprising formulas (I), (II), and (III). Applicants in describing their mixtures which “is the polymer of component (A), do not distinguish from polymers with (I), (II) and (III) and those which have present (I), (II) and optionally (III) and if doing so would have trouble with the use of “is” in the resin component (A) is a polymer....”. Further, a polymer with two units made from a homopolymer wherein some of the units are after treated to make up a second unit or a polymer made by copolymerizing two units to form substantially the same polymer are equivalent polymers under product by process claim language with respect to examination practice in the USPTO as set forth in MPEP 2113. Further, the forming of a polymer yields a mixture of polymer chains having varied lengths and varied amounts of units per polymer chain thus yielding substantially a mixture of polymers inherently even if referenced as a polymer or copolymer. Thus, when applicants claim a mixture of copolymers wherein one polymer which is made of two units and thus substantially a copolymer even though made by another method wherein a homopolymer is after treated in such a manner as to leave a polymer with two distinctly different units present then the polymer made by the after treatment is a mixture of copolymers substantially when considering that the product of polymer is substantially the same as if made by copolymerization. Copolymers are generally inclusive of any number of mers with 2 being the minimum number. Thus, a terpolymer consisting of structural units of formulas (I), (II) and (III) is a copolymer which is a inherently a mixture of polymers of which the average chain length and average amounts of each structure are used to identify the mixture as a polymer. The addition of more of a copolymer comprised of structures of (I) and (II) does not limit the structure to a homopolymer that has been thus after treated but leaves open the inclusion of

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copolymers being after treated with any other structure adding being an option would read on the inherent mixture of the terpolymer of the polymer also present. Because polymers are inherently mixtures to begin with then calling part of the mixture a copolymer and another part of the mixture a polymer does not remove the obviousness of using the polymer of the prior art which is inherently a mixture. Applicants point to their examples 7-10 to show comparative results but do not limit their claims to the compositions in those examples as evidenced by using "comprising" when claiming the copolymer. Applicants in their claim language require the presence of the polymer with (I), (II) and (III). Applicants do not require that there be present a polymer without (III). Applicants do not show the difference between a polymer wherein (I), (II) and (III) are present and (II) is formed after copolymerization and that of a polymer wherein (I), and (II) and (III) are formed by polymerization of three monomers.

The showing made by applicants is to a polymer with (I), (II) and (III) and a polymer wherein (I) and (II) are present but no (III) is present. Claim 1 requires that the polymer which is claimed as a mixture of polymers has present all of (I), (II) and (III). Thus, applicant's showing is not commensurate in scope with the claimed invention. Further, in Malik (6,133,412), the presence of the styrene unit in col. 5 is governed by y which is as found in col 6 from 0 to 0.4 mole fraction present. Thus, it is optionally present and a mixture of any of the polymer set forth in col 5 within the mole fractions set forth in col 6 to obtain the acetal derivized material of Malik would have been prima facie obvious as substituting one known element for another to obtain predictable results, i.e. mixing polymers with in the description of polymer in Malik et al to obtain the same results as sought by Malik et al. The rejection stands.

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Applicants argue with respect to claim 12 and Malik et al. (6,133,412) in view of Malik et al. (SPIE Vol. 3678, 1999) further in view of Pasini et al and Hein et al that because the actual method of incorporation of adamantyl group set forth by Hein et al or Pasini would not yield the instant generic polymer then the rejection over such is not prima facie obvious. The rejection is drawn to the use of the adamantyl group as an etch resistant group in the compositions of Malik et al made in the manner set forth in Malik et al. The method of attachment via vinyl ether is taught by Malik et al. The use of the adamantyl group for improvement of etch resistance is taught by Pasini, thus the use of such a group in the method of Malik et al for the same reasons would have been obvious over the prior art of record as set forth. The rejection stands. The examiner notes that applicants understood the rejection to include both Pasini et al and Hein et al thus finality is not removed because of an incomplete rejection.

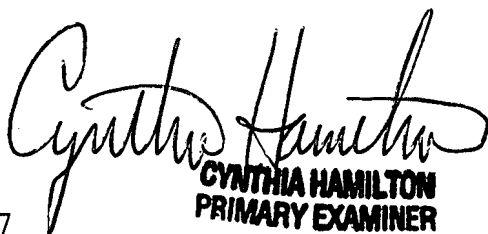
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Hamilton whose telephone number is 571-272-1331.

The examiner can normally be reached on Monday through Friday 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (571) 272-0729. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



**CYNTHIA HAMILTON
PRIMARY EXAMINER**

Cynthia Hamilton
Primary Examiner
Art Unit 1795

October 10, 2007